

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

Prescribed Burning

(Acre)

Code 338

DEFINITION

Applying controlled fire to a predetermined area.

PURPOSES

- To control undesirable vegetation.
- To prepare sites for harvesting, planting or seeding.
- To control plant disease.
- To reduce wildfire hazards.
- To improve wildlife habitat.
- To improve plant production quantity and/or quality.
- To remove slash and debris.
- To enhance seed and seedling production.
- To facilitate distribution of grazing and browsing animals.
- To restore and maintain ecological sites.

CONDITIONS WHERE PRACTICE APPLIES

On native pasture, pasture, wildlife land, hayland, and other lands as appropriate.

CRITERIA

Comply with applicable federal, state, and local laws and regulations during the implementation of this practice.

Prescribed burns will only be conducted when a Prescribed Burn Plan has been developed by a trained and qualified individual.

Burning shall only be done when soil and site conditions are such that soil loss does not exceed tolerable limits.

Burn only when transport wind will carry smoke away from sensitive areas (roads, residences, power lines, etc).

A burn shall not be conducted within one (1) mile of an airport, unless written permission is obtained from airport authorities.

Prior to the burn, firebreaks will be established that separate the area to be burned from those needing protection. See Natural Resources Conservation Service (NRCS) Field Office Technical (FOTG) Standard (394) Firebreak for additional guidance.

Landowners will be notified that they are responsible for confining prescribed burns to their lands and are liable for damages and costs to others should the fire escape from the designated area.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service State Office, or download it from the electronic Field Office Technical Guide for your state.

Prior to initiating a burn the landuser shall complete all of the following:

- a) Inform the local law enforcement agencies, fire chief, rural fire department or fire district and board of health of planned burns.
- b) Have all necessary tools, equipment, and adequately trained and experienced personnel on site to properly conduct the burn.
- c) Notify all adjoining and potentially affected landowners or landusers.
- d) Insure that all persons involved in the burning procedure fully understand the burning plan.
- e) Obtain the latest site specific weather forecast.
- f) Defer burning in conditions with high fire danger levels. Burn only within the prescription set forth in an approved prescribed burn plan.

Where wildlife habitat is the primary concern, and except as noted below, only about 1/3 of the area will be burned in any one year to retain vegetation as nesting cover. Greater than 1/3 of the area may be burned when:

- a) Management units will be one acre or less
- b) Other nearby management units under control of the landowner will be left unburned in the same year
- c) Required for initial establishment purposes

Time the burn just as the desired species starts to break dormancy in the spring and the species has one to three inches of new growth. Timing of burn for warm season grass/forbs stands will vary depending upon the intended purpose.

Burn shortly after bud break and before full leaf stage to control woody species such as boxelder, mulberry and silver maple. To control

coniferous species, burn just after the largest species starts to grow.

Burn when there is sufficient steady wind velocity to carry the fire.

Grazing shall be reduced the year prior to a scheduled pasture burn if grazing is reducing the fuels needed for an effective fire.

Protect burned area from grazing until there is 10 to 12 inches of new growth.

CONSIDERATIONS

Consider that high relative humidity and low temperatures will often reduce fire intensity and effectiveness. Topography (i.e. steep slopes, southern aspect, etc.) also influences the fire spread and intensity.

Burns should be accomplished when the mulch layer and soil surface are slightly moist but dry enough to carry a fire. Generally this is 1-3 days after a rain on grassland. The relative humidity should be between 30-60 percent.

Consider reducing the fuel height to about 1 foot next to the fire line, this will greatly reduce the intensity of the fire at the fire line. Remove snags and brush piles near the firebreak to help prevent fires from escaping or spotting over.

Consider the short-term effect of prescribed burning due to residue removal may increase runoff and decrease infiltration of water.

Consider the use of fire in wetland areas to:

- a) Thin out dense, persistent emergent wetland vegetation
- b) Create areas of open water for breeding pairs
- c) Create feeding, brood cover and habitat for molting birds

When burning wetlands, consider burning only about 1/3 of the complex in a single year to retain vegetation as habitat for birds that nest over water and as a winter cover for other wildlife such as deer and pheasants.

Consider not burning organic soil wetlands because of severe fire hazards associated with these types of soils. If prescribed burning is necessary, consider only conducting burns when soils are either frozen or saturated to the point they are unlikely to burn.

Consider burning mineral soil wetlands when the site is dry or nearly dry. Any vegetation that is moist or over open water will not usually burn. Normal dates for burning wetlands are from fall through late winter. Burning over ice with no snow pack on the wetland is effective. A snow pack will prevent burning.

Consider the use of prescribed burning to disrupt disease cycles and insect reproduction, thus decreasing the need for pesticides and promoting a vigorous plant community. .

Consider the use of prescribed burning to meet a specific management objective. Prescribed burning is not usually meant to be an annual management practice.

The burn crew should wear clothing of natural materials (i.e. cotton, wool, leather, etc.). Cap, gloves and high top leather boots are needed. Note: fire resistant clothing is preferred.

Each person should have a means to start a fire and should be instructed in emergency procedures if trapped by the fire.

Participants should constantly evaluate preplanned escape routes, especially if burn is conducted under low light conditions.

PLANS AND SPECIFICATIONS

Specifications for establishment and operation of this practice shall be prepared for each field or treatment unit according to the Criteria, Considerations, and Operation and Maintenance described in this standard. Specifications shall be recorded using approved specification sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

A written burn plan will be prepared by a trained and qualified individual. As a minimum, a Prescribed Burn Plan will include:

- Map indicating the location of the burn and sensitive areas
- Resource management objectives and timing of the burn
- Pre-burn vegetative description of the area
- Acceptable conditions for the burn, ie.. wind speed, wind direction, air temperature, humidity level, fuel moistures
- Description of pre-burn preparations
- Description of the firing technique to be used.
- Equipment/personnel/safety requirements
- Firebreak locations and types
- Names and telephone numbers of local agencies to be contacted on the day of the burn.

OPERATION AND MAINTENANCE

The kinds and expected variability of site factors (e.g., fuel condition and moisture content, weather conditions, human and vehicular traffic that may be impeded by heat or smoke, liability, and safety and health precautions) shall be monitored during the operation of this practice. Sufficient fire suppression equipment and personnel shall be available commensurate with the expected behavior of these factors during the time of burning to prevent a wildfire or other safety, health, or liability incident.

Maintenance shall include monitoring of the burned site and adjacent areas until such time as ash, debris, and other consumed material is at pre-burn temperatures.